

## **Assessment of the Mortar and Opus Signinum from Sudbrooke, Lincolnshire (SUB05)**

### ***Alan Vince***

Fragments of mortar and Opus Signinum from an excavation at Sudbrooke, Lincolnshire, were submitted for identification and assessment.

### Description

#### **Opus Signinum**

Opus Signinum was a type of water-resistant concrete used during the Roman period. The fragments from Sudbrooke are composed of angular fragments of tile, up to 30 mm long, rounded quartzite pebbles, light brown calcareous sandstone fragments, all of similar size, and quartzose and crushed tile sand with rounded quartz grains up to 1.0mm across and angular fragments of tile of similar size. Sparse bladed crystals possibly of gypsum, up to 2.0mm across, may have been added as aggregate or formed by recrystallisation in voids after burial.

The Opus Signinum comes from two contexts, 116 and 308. That from 116 is finer in texture, with the largest aggregate fragments being 15mm long. These fragments have a skim of pink material which, viewed at x20 magnification using a binocular microscope, appears to be composed of a mixture of ground tile and mortar. This may have been used to increase the water resistance or to give a pink colour to the surface (Munsell 5YR 7/4).

#### **Mortar**

Fourteen fragments of lime mortar were recovered, all from context 308. The aggregate in this mortar consists of rounded fragments of oolitic limestone, up to 20mm across and the sand fraction consists of rounded quartzose sand. Tile is completely absent.

### Assessment

The Opus Signinum fragments indicate the existence of a hypocaust, bath or similar structure on the site and indicate a high degree of Romanisation. The lime mortar, on the other hand, could have been used in any mortared walling. The finds require no further study and have been packaged for permanent storage.